

## **South Carolina's "Uninvited" Hurricane Matthew, October 2016**

At 5:00 p.m. on Thursday, October 6, 2016, a major Hurricane Matthew (category 4) was positioned by the National Hurricane Center near Freeport, Grand Bahama Island and moving northwest. By 7:00 a.m. on Friday, October 7, the outer-most rain bands were approaching Beaufort County. The United States Coast Guard Pilot closed the Charleston Harbor to all traffic at 10:00 a.m. Northeast winds gusted to 54 mph at the Fripp Nearshore Buoy at 4:08 p.m., then at 8:50 p.m., reached 63 mph in heavy rain from the north over Hilton Head Island. Matthew's center of circulation at 11:00 p.m. was placed by Charleston National Weather Service Doppler radar at an estimated 40 miles southeast of Hilton Head and moving north at 12 mph. In less than 5 hours and in the darkness of Saturday morning, winds over Hilton Head increased to hurricane force (74 mph) with "steep pressure falls." Blowing heavy rain had accumulated to 9.83 inches at Limehouse. Radar at 4:00 a.m. placed the western eyewall of Matthew over Hilton Head Island and Edisto Island. Onshore winds ahead of the hurricane forced water in the Charleston Harbor to a height of 9.289 feet at 2:48 a.m. (highest since Hurricane Hugo in 1989) and there were reports that Whitepoint Gardens on the Battery were under water. At 6:50 a.m., measured winds at the Hilton Head Island AP roared at 88 mph. Downed trees caused extensive damage to electrical utilities and homes, and brought most of the island's quiet roadway traffic to a halt. Not since Hurricane Gracie in September of 1959 had these conditions been witnessed by the state's southern-most islands. Seas at the Edisto Buoy were reported at 7.7 meters (25 feet). Wind-driven breakers dismantled the lower floors of Edisto Island's low-elevation beachfront cottages and moved an estimated four feet of beach sand on to Palmetto Boulevard and to the second row. Up the coast in North Myrtle Beach, a short path and narrow tornado (EF0) formed near 6:46 a.m. and tracked westward from the shore through the Surf Golf and Beach Club toppling mature oaks and damaging homes. The Folly Beach Pier recorded a wind gust of 75 mph at 7:46 a.m. Winds at the Fort Sumter Range Light peaked at 80 mph at 10:06 a.m. Large watercraft, torn from their moorings, were seen drifting in the marsh at the Isle of Palms. The National Hurricane Center 11:00 a.m. bulletin landfalled Hurricane Matthew (category 1) at the Cape Romain National Wildlife Refuge near McClellanville. Torrential rains at Galivant's Ferry were up to 11.64 inches. At around the noon hour, giant waves began breaking apart the Springmaid Pier at south Myrtle Beach. High winds at Florence gusted to 67 mph with downed trees reported as "everywhere." At 4:24 p.m., the Georgetown Winyah Bay Range Light recorded a wind gust of 103 mph. Just 26 minutes later, a wind speed of 87 mph was observed at Murrells Inlet. Surface winds at 5:44 p.m. gusted to 70 mph at the N Myrtle Beach Grandstrand AP. An apparent electrical fire was reported early that evening in Cherry Grove at 49<sup>th</sup> Avenue North which rapidly consumed a multi-unit vacation complex. Fanned by near hurricane force winds, flames spread into at least four more beachfront properties leaving little but ashes. Just before midnight, flash flooding from an earthen dam failure at Wallace in Marlboro County was blamed for a train engine and four-car derailment. The calendar-day October 8 rainfall at Florence of 11.74 inches was their greatest one-day rainfall in over 120 years of recordkeeping and bested the record rains of the "Bulls Bay Hurricane" in 1916 and "Hazel" in 1954. On Sunday morning, October 9, Mullins reported a running event rainfall total of 15.06 inches. The Lumber, Little Pee Dee and Waccamaw rivers had swelled to a "Major Flood" condition and were rising. On Wednesday, October 12, the Little Pee Dee River at Galivant's Ferry rose to a record crest of 17.10 feet. The town of Nichols was submerged under the adjacent Lumber River floodwaters to what was described as "car and home windows deep." Non-elevated property along the Waccamaw River near and below Conway had to be abandoned. At 5:15 a.m. on Tuesday, October 18, the Waccamaw River near Conway reached an all-time record stage of 17.89 feet surpassing the flood of September 1928.

Many riverside docks and decks, private or state-owned, had been swept away. On November 2, and after 25 days at or above flood stage (11 feet), the Waccamaw River near Conway subsided to below flood stage.

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